

# Green Power: A New Opportunity for Performance Track Participants

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# Overview

- Why Businesses Buy Green Power
- Green Power Basics (How, Where, and \$)
- Green Power Options
- Buying Green Power
- How EPA Can Help
- Joining the Green Power Partnership

# EPA Green Power Partnership

- **Transforming Markets for Renewable Energy**
  - Encourage voluntary purchases of renewable energy
  - Build demand for new renewable energy facilities
  - Reduce the risk of climate change
- **Offering Carrots, Not Sticks**
  - Offer credible benchmarks and market information
  - Promote partners' environmental leadership
- **Keeping It Simple**
  - Sign agreement and complete purchase within 1 year
  - Provide annual update



# Green Power Partnership Status

- Our +600 Partners use 3 million MWh/yr of green power
  - 20 Fortune 500 companies are partnering with EPA
- Our Top 25 Partners are attracting media attention

Green Power Usage (MWh)	% of Total Electricity	Organization Type	Provider	Resources
<b>1. <u>U.S. Air Force</u></b>				
321,416	4%	Government (Federal)	Various	Various
<b>2. <u>Johnson &amp; Johnson</u></b>				
241,398	24%	Manufacturing	On-site Generation, 3 Phases, PECO Energy, Sempra Energy, Sterling Planet	Biomass, Small-hydro, Solar, Wind
<b>3. <u>U.S. Environmental Protection Agency</u></b>				
220,898	75%	Government (Federal)	Various	Various
<b>4. <u>The World Bank</u></b>				
85,000	100%	Non-Profit	Wind Current	Wind
<b>5. <u>U.S. General Services Administration / Region 2</u></b>				
76,185	33%	Government (Federal)	Con Edison Solutions, Constellation NewEnergy/ERT, Other, PEPCO Energy Services	Biogas, Wind
<b>6. <u>Whole Foods Market</u></b>				
71,428	20%	Food, Food Services	3 Phases, Community Energy, PNM, Renewable Choice Energy	Biomass, Geothermal, Small-hydro, Solar, Wind

# What Do Businesses Need from Corporate Environmental Strategies?

- A credible response to stakeholders' concerns
- High value-to-cost ratio
- A solution that doesn't require extensive technical explanation
- Ease of implementation
- CEO suitability

# Why Purchase Green Power?

- Provides low-cost, high-impact environmental performance improvement
- One-step, scalable environmental leadership strategy
- Easy to understand and communicate!!
  - “Elevator story”
- Trackable, comparable.
- Captures favorable attention on Wall Street
- Supports growing industry focus on climate change
- Marketing value can exceed energy or environmental value
- Compelling cost to benefit ratio
- Cost stability = management acuity



# Why Green Power?

## Reason Businesses Buy

- Strong Value Proposition
  - Enhance image or branding
  - Variety of marketing opportunities
  - Influence stock market performance
- Corporate Responsibility
  - Meet organizational environmental or social objectives
  - Strengthen stakeholder relationships
  - Join ranks of companies implementing sustainable activities
- Easy Way to Improve Environment
  - Single easiest way to reduce environmental impact associated with electricity consumption
  - Supporting new industry focus on climate change



# Green Power Options

- Green power is an “environmentally-differentiated” electricity product from:

solar

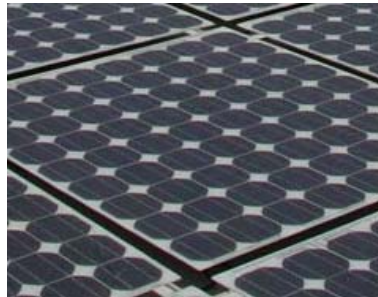
wind

geothermal

biomass

biogas

small hydro





# Buying Green Power Product Options

## 1. Green Power Electricity Products

- Buy electricity from utility green pricing programs or green power retail marketers that is all or partially generated from renewable sources



## 2. Renewable Energy Certificates (REC)

- Buy only the “attributes” associated with the electricity generated (1 REC = 1MWh)



## 3. On Site Generation

- Install renewable energy system on site, e.g. Solar panels



# Buying Green Power REC Benefits

- Availability
  - Even if local power provider has no green power options
- Flexibility
  - Type of renewable resources
  - Volumes purchased
  - Location of resource
  - Leased space
  - Simplicity for companies with locations across multiple states
- Blend Resources
  - Wind/ Landfill Gas/ Solar/ Geothermal
  - Local/ National
- Avoidance of physical supply issues
  - Does not impact contract with current provider
- Attribute ownership
  - Buyers should specify ownership of attributes in contract

# Buying Green Power

## Sample REC Prices

### Sample Range of Voluntary Market REC Wholesale Prices for NEW Sources (by Type and Region in \$/MWh)

Location	Wind	Solar	Biomass	Small Hydro
California	\$1.75-2.00		\$1.50	
Western States (WECC)	\$1.25-7.50	\$30.00-150.00	\$1.50-3.50	
Central U.S.	\$2.00-5.50		\$1.50	
PA, NJ, MD (PJM)	\$15.00-17.00	\$80.00-200.00	\$4.00-5.00	
New York	\$15.00-16.00		\$6.00	
New England (NEPOOL)	\$35.00		\$45.00	\$5.00
Southwest (SPP)	\$2.50-5.00			
Southeast			\$3.50	

You can find real-time REC wholesale prices online through Evolution Markets (a REC Broker):

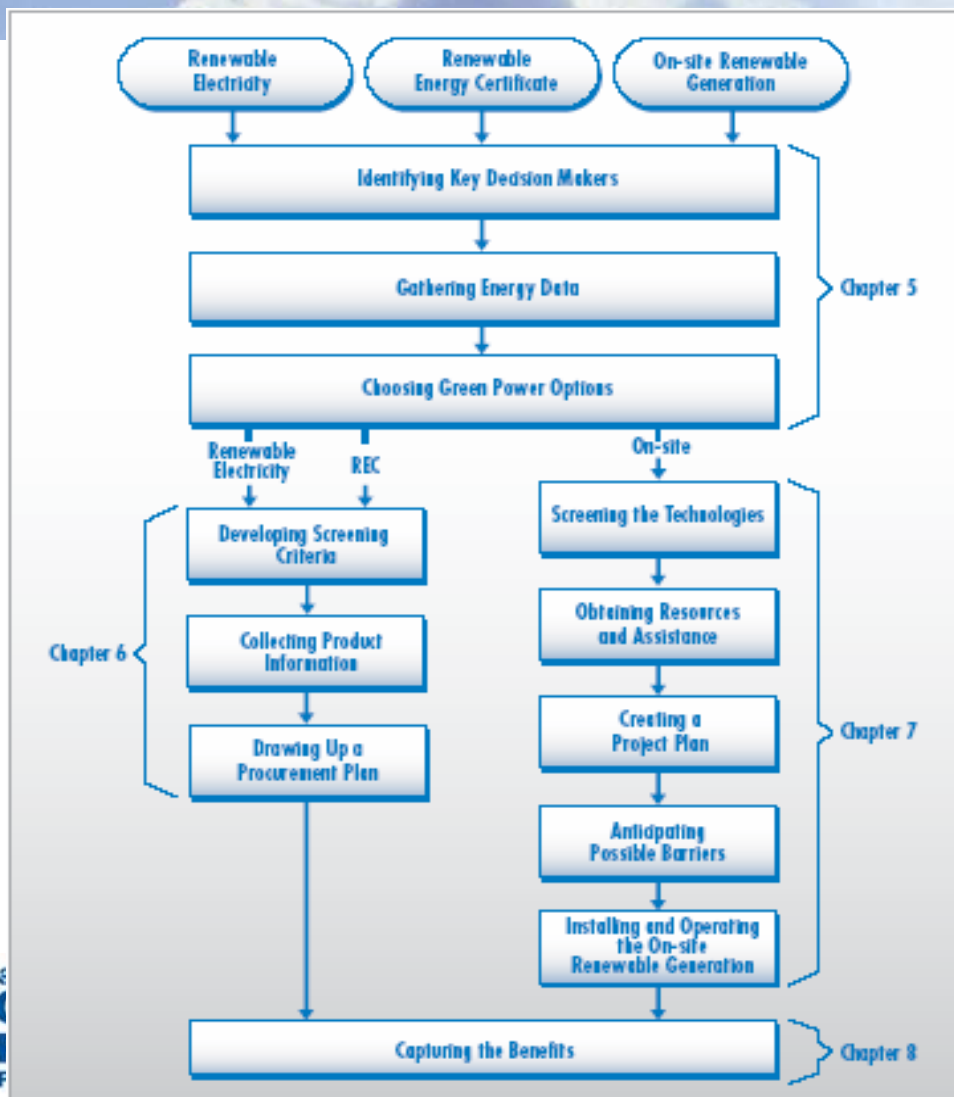
[www.evomarkets.com](http://www.evomarkets.com)



Source: From the National Renewable Energy Laboratory (NREL) 2005 report - <http://www.eere.energy.gov/greenpower/resources/pdfs/37388.pdf>

Note: The Texas (ERCOT) market is not represented in this chart.

# Steps to Buying Green Power



From the *Guide to Buying Green Power* available at:  
<http://www.epa.gov/greenpower/buygreenpower/guide.htm>



# How EPA Can Help Overview

- Credible Benchmarks
  - Metric for “How much green power is enough?”
  - Metric for “How much green power is outstanding?”
  - List of eligible renewable resources
- Market Information
  - *Guide to Buying Green Power*
  - List of green power vendors
  - Environmental impact information
  - Other resources online ([www.epa.gov/greenpower](http://www.epa.gov/greenpower))
- Recognition
  - Use of EPA Green Power Partner mark
  - Press and communications support
  - Green Power Leadership Awards eligibility





# Questions?

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